



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

*SW*

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/006,496

12/05/2001

Bryan D. Wolf

IGT1P064/P-463

4155

22434

7590

02/10/2004

BEYER WEAVER & THOMAS LLP

P.O. BOX 778

BERKELEY, CA 94704-0778

EXAMINER

CAPRON, AARON J

ART UNIT

PAPER NUMBER

3714

DATE MAILED: 02/10/2004

*9*

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/006,496

Applicant(s)

WOLF, BRYAN D.

Examiner

Aaron J. Capron

Art Unit

3714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

This is a response to the Amendment received on December 12, 2003, in which claim 44 was amended. Claims 1-46 are pending.

#### *Claim Rejections - 35 USC § 101*

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 44-46 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The claimed invention appears to be a mathematical algorithm performing calculations or data manipulation that indicates a result which lacks providing a useful, concrete and tangible result, there from. See *State Street Bank & Trust Co. vs Signature Financial Group Inc.*, 47 USPQ 2d 1596, 1601-02 (Fed Cir 1998). Specifically, the claimed invention appears to be non-functional descriptive material that is not in combination with a computer system so as to impart functionality of steps thereto. Where “interconverting between a number representing a game arrangement and a symbolic representation of the game arrangement, wherein the game arrangement is specified by a unique combination of positions and symbols associated with a particular game” is a preamble term that fails to breath life and meaning into the claims since it is not ‘essential to point out the invention defined by the claim’. *Kropa v. Robie*, 88 USPQ 478, 481 (CCPA 1951). Further, the term does not limit the structure of the claimed device. *In re Stencel*, 4 USPQ2d 1071 (Fed. Cir. 1987). Finally, the term recites an intended use of structure

Art Unit: 3714

where the claim body does not depend on the preamble for completeness such that the structural limitations stand alone. *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976).

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-10, 12-22, 24-25, 27-28, 30-36, 38-39, 41-44 are rejected under 35

U.S.C. 102(b) as being anticipated by Lawrence et al. (U.S. Patent No. 5,967,893; hereafter “Lawrence”).

Lawrence discloses receiving the number representing the game arrangement (4:43-64); for a given position or symbol associated with the game arrangement, (a) setting the given position or symbol to a particular value of the position of symbol and calculating the number of ways to place the remaining free positions or symbols available beyond the given position or symbol (Column 5, Table 1), (b) using the calculated number of ways to place in a comparison with the received number representing the game arrangement (Column 5, Table 1), and (c) from the comparison, determining whether the particular value of the given position or symbol appears in the symbolic representation of the game arrangement (5:58-6:28); and setting one or more symbols or positions of the symbolic representation from the determination made in (c).

Referring to claim 2, Lawrence discloses determining from the comparison that the particular value of the given position does not appear in the symbolic representation of the game

Art Unit: 3714

arrangement (5:58-6:28); incrementing the particular value of the position or symbol; and performing (a)-(c) on the incremented particular value of the position or symbol.

Referring to claim 3, Lawrence discloses repeating (a)-(c), with newly incremented particular values, until determining that the particular value of the given position or symbol does appear in the symbolic representation of the game arrangement (5:58-6:28); choosing a second given position of symbol associated with the game arrangement; and performing (a)-(c) for the second position or symbol associated with the game arrangement.

Referring to claim 4, Lawrence discloses subtracting the calculated number of ways to place from a current game arrangement number that is either (i) the number representing a game arrangement or (ii) a number that has been derived from the number representing a game arrangement (4:46-47).

Referring to claim 5, Lawrence discloses the number that has been derived from the number representing a game arrangement was derived by subtracting previously calculated number of ways to place for other particular values of the given position or symbol (Column 4).

Referring to claim 6, Lawrence discloses the number of ways to place is calculated with a permutation function, an exponential function, or a choose function, depending on how the particular game is classified (Column 4).

Referring to claim 7, Lawrence discloses the particular game is classified based on at least one of the following: whether the arrangement of symbols is position-dependent and whether a given symbol can appear more than once in the game arrangement (for a poker game).

Referring to claims 8-10, Lawrence discloses the game can be poker, a slot machine, keno or checkers (abstract) and the computing machine is a gaming machine (1:6-9).

Art Unit: 3714

Referring to claim 12, Lawrence discloses retrieving the number representing the game arrangement from a stored list or table of possible game arrangements when a player initiates a game on a gaming machine (abstract).

Referring to claim 13, Lawrence discloses the number of ways to place is calculated with a software-coded function or look-up table, depending on how the particular game is classified (abstract).

Claims 14-22 and 24 correspond in scope to a method set forth for use of the computer program product listed in the claims above and are encompassed by use as set forth in the rejection above.

Claims 25, 27-28, 30-35 correspond in scope to a method set forth for use of the method listed in the claims above and are encompassed by use as set forth in the rejection above.

Claims 36, 38-39, 41-43 correspond in scope to a method set forth for use of the method listed in the claims above and are encompassed by use as set forth in the rejection above.

Claims 44-46 correspond in scope to a method set forth for use of the method listed in the claims above and are encompassed by use as set forth in the rejection above.

Claim 26 and 37 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Lawrence.

Referring to claim 26, Lawrence discloses setting the current game arrangement number to zero at the beginning of the method (2:66-3:1, column 4). In the alternative, it is notoriously well known within the art of computer programming to define a number, such as the term "index", to be zero in order to set the number as a non-null number. This procedure prevents

Art Unit: 3714

software code from calculating abstract values that a computer cannot properly comprehend.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate a game arrangement number to be zero into the method of Lawrence in order to prevent software code from calculating abstract values that a computer cannot properly comprehend.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 11, 23, 29 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lawrence in view of Applicant's Admission.

Referring to claims 11 and 23, Lawrence discloses a method of converting a number representing a game arrangement into a symbolic representation, but does not disclose retrieving the number representing the game arrangement from a game history storage location



Art Unit: 3714

on a gaming machine. However, Applicant admits that gaming machines typically store information about recently played games or game sequences in non-volatile memory. Then, if a gaming machine fails for any reason, disputes between casinos and patrons and can be resolved by replaying the game histories in recorded in the nonvolatile memory or other storage medium in the gaming machine or casino (page 8, second full paragraph). One would be motivated to combine the references in order to determine the game sequences and outcomes by generating the history in case of a power failure. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate a game history storage location into Lawrence's method in order to determine the game sequences and outcomes by generating the history in case of a power failure.

Claim 29 corresponds in scope to a method set forth for use of the method listed in the claims above and is encompassed by use as set forth in the rejection above.

Claim 40 corresponds in scope to a computer program product set forth for use of the method listed in the claims above and is encompassed by use as set forth in the rejection above.

### ***Response to Arguments***

Applicant's arguments filed December 12, 2003 have been fully considered but they are not persuasive.

Applicant argues that the method recited in the claims produces an algorithm having a sufficiently useful, concrete, and tangible result. However, a method of developing an algorithm on a computer machine is merely the intended or nominal use of a component, albeit within the technological arts, does not confer statutory subject matter to an otherwise abstract idea if the



Art Unit: 3714

component does not apply, involve or advance the underlying process. As defined by MPEP 2106 and 2111, the Examiner cannot read limitations of the specification into the claims. Further, as recited in the previous office action, where the term “interconverting between a number representing a game arrangement and a symbolic representation of the game arrangement, wherein the game arrangement is specified by a unique combination of positions and symbols associated with a particular game” is a preamble term that fails to breath life and meaning into the claims since it is not ‘essential to point out the invention defined by the claim’. *Kropa v. Robie*, 88 USPQ 478, 481 (CCPA 1951). Further, the term does not limit the structure of the claimed device. *In re Stencel*, 4 USPQ2d 1071 (Fed. Cir. 1987). Finally, the term recites an intended use of structure where the claim body does not depend on the preamble for completeness such that the structural limitations stand alone. *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976).

Applicant argues that Lawrence fails to convert a number representing a game arrangement into a symbolic representation of the game arrangement. In response to applicant's arguments, the recitation “converting a number representing a game arrangement into a symbolic representation of the game arrangement” has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). After reviewing the claim as a whole, the recitation of “converting a number representing

Art Unit: 3714

a game arrangement into a symbolic representation of the game arrangement” since it merely recites the purpose of the process and does not tie into the body of the claim. Therefore, the claimed invention fails to preclude Lawrence’s invention.

Applicant further argues that Lawrence fails to disclose a computing machine using the number during game play on a gaming machine. However, Lawrence uses a computing machine to continually tabulating distribution data associated with occurrence of possible resulting hands (Lawrence claim 1). Therefore, the claimed invention fails to preclude Lawrence’s invention.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Schneier et al (U.S. Patent No. 6,099,408) discloses converting a determined number to a sequence of cards (13:35-14:3).

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 3714

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron J. Capron whose telephone number is (703) 305-3520. The examiner can normally be reached on M-Th 8-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Hughes can be reached on (703) 308-1806. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.

ajc



MARK SAGER  
PRIMARY EXAMINER